



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,583	09/08/2003	Thomas G. Cremers	6197US	9891

30173 7590 08/08/2006

GENERAL MILLS, INC.
P.O. BOX 1113
MINNEAPOLIS, MN 55440

EXAMINER

HUYNH, LOUIS K

ART UNIT	PAPER NUMBER
----------	--------------

3721

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,583

Applicant(s)

CREMERS ET AL.

Examiner

Louis K. Huynh

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 3,4 and 32 is/are allowed.
6) ☒ Claim(s) 1,2,5,6,8 and 10-17 is/are rejected.
7) ☒ Claim(s) 7 and 9 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. In light of the petition decision mailed on 06/01/2006, the restriction requirement mailed on 06/06/2005 is hereby withdrawn.
2. Claims 1-17 and 32 are pending in the present application.
3. Claims 5-17 and 32 are hereby rejoined and a non-final rejection in response to the amendment filed 08/23/2005 is as follows:

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-4, 10 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 1, lines 4 & 5: “a ... pivot shaft pivotally connected to the frame” is indefinite because the first and the second pivot shafts do not pivot with respect to the frame; they are connected to the frame for rotation only.
- Claim 1, lines 9 & 11: “as it passes” lacks proper antecedent basis; no device for moving the insert past the fingers has been set forth in the claim.
- Claim 3, lines 5 & 6: “a ... pivot shaft pivotally connected to the frame” is indefinite because the first and the second pivot shafts do not pivot with respect to the frame; they are connected to the frame for rotation only.
- Claim 3, lines 11 & 13: “as it passes” lacks proper antecedent basis; no device for moving the insert past the fingers has been set forth in the claim.

Art Unit: 3721

- Claim 4, lines 5 & 6: “a ... pivot shaft pivotally connected to the frame” is indefinite because the first and the second pivot shafts do not pivot with respect to the frame; they are connected to the frame for rotation only.
- Claim 4, lines 11 & 13: “as it passes” lacks proper antecedent basis; no device for moving the insert past the fingers has been set forth in the claim.
- Claim 10, line 2: “a pair of folder lever arms” render the claim indefinite for it is unclear as to what folder lever arms applicant is referring.
- Claim 32, lines 6-7: “a ... pivot shaft pivotally connected to the frame” is indefinite because the first and the second pivot shafts do not pivot with respect to the frame; they are connected to the frame for rotation only.
- Claim 32, lines 10 & 12: “as it passes” lacks proper antecedent basis; no device for moving the insert past the fingers has been set forth in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Budde et al. (US 5,300,011).

With respect to Claim 1, Budde discloses an apparatus for folding an object (12) including: a frame (cross hatched member), first and second pivot shafts rotationally connected to the frame, first and second lever arms (78) respectively perpendicularly connected to the first

Art Unit: 3721

and second pivot shafts for pivoting with respect to the frame, and a first and a second folder fingers (74a) substantially perpendicularly connected to the first and second pivot shafts via the first and second lever arms (78), wherein the folder fingers are adapted to engage the object (12) as it passes the folder fingers (74a) (FIGS. 6, 7 & 9H).

With respect to Claim 2, Budde further discloses in FIGS 6 & 7 a third and fourth pivot shafts connecting the lever arms (78) to a reciprocating plate (76). The third and fourth pivot shafts are considered to be cam followers since they follow the reciprocating movement of the plate (76).

8. Claims 5, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Langen (US 3,937,458).

With respect to claim 5, Langen discloses an apparatus for placing an insert comprising a horizontal shaft (54); a suction cup (66) supported by a first pillow block (disc 62); wherein the first pillow block (62) has a bore for receiving the horizontal shaft (54).

With respect to claim 6, the apparatus of Langen further includes a chain (40) routed around a sprocket (36) and interconnected to the disc block (62) via a plurality of gears (26 & 42); wherein the chain (40) is also connected to a motor via an inherent sprocket on the motor for driving the sprocket (36) (col. 3, lines 11-19). The chain (40) and the sprockets (36) are equivalent to the claimed timing belt and pulleys recited in the claim.

With respect to claim 8, the apparatus of Langen further includes vertical shaft (64) supporting the suction cup (66), and a second pillow block (lock nut) having a bore for receiving the vertical shaft (64) and for holding the vertical shaft to the first pillow shaft (62).

Art Unit: 3721

9. Claims 5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (US 3,797,822).

With respect to claim 5, Anderson discloses an apparatus for placing an insert comprising a horizontal shaft (48); a suction cup (58) supported by a first pillow block (30); wherein the first pillow block (30) has a bore for receiving the horizontal shaft (48).

With respect to claim 10, the apparatus of Anderson further includes a cam (50) supported off of the first pillow block (30).

10. Claims 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by VanderMeer et al. (US 5,271,709).

With respect to claims 11-13, VanderMeer discloses an apparatus for nesting a group of articles (12) comprising an accumulating conveyor (22) having a first operational speed and a second operational speed that is slower than the first operational speed (col. 6, lines 22-68), and sensor (86) and other additional sensors for detecting movement of the articles (col. 6, lines 8-21); wherein the conveyor (22) shifts from the first operational speed to the second operational speed as a predetermined number of articles are swept off the conveyor (col. 6, lines 43-53), and the conveyor (22) shifts to the first operational speed as the group of articles has been swept off the conveyor (col. 6, lines 62-68).

Art Unit: 3721

11. Claims 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Gallagher (US 6,018,933).

With respect to claims 15 and 17, Gallagher discloses an apparatus for compressing a group of articles comprising a pair of vertical side walls (40A & 42A) forming two sides of a holding volume adapted to hold a group of articles (P) and adapted to converge toward each other to hold and align the group of articles (P), a ceiling structure (32A) located above the holding volume and adapted to engage the upper portion of the articles (P), and a gate (70A) pivotable between a vertical position and a horizontal position (FIGS. 5 & 6).

With respect to claim 16, although the ceiling structure (32A) is different in structure from the claimed plate, it is considered to be equivalent to the claimed plate for they both serve the same purpose of preventing the articles from moving upward during alignment/compression.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over VanderMeer et al. (US 5,271,709).

The apparatus of VanderMeer meets all of applicant's claimed subject matter but lacks the specific teaching of an infeed conveyor having an operational speed that is less than the first operational speed of the accumulating conveyor for feeding the article to the accumulating conveyor. However, articles must be fed from an upstream conveyor, such as an output

Art Unit: 3721

conveyor of a packaging machine, to the accumulating conveyor (22), and the operational speed of the upstream conveyor should be less than the first operational speed of the accumulating conveyor because the group of predetermined number of articles must be separated from the stream of input articles and this process is well known to the artisan in the art of conveying group of articles. Therefore, it would have been obvious to a skilled person in the art, at the time of the invention, to have provided the apparatus of VanderMeer with an input conveyor operating at a speed less than the first speed of the accumulating conveyor so that a predetermined number of articles could be separated from the stream of articles coming from the input conveyor.

Allowable Subject Matter

14. Claims 3 and 4 are allowed over the art of record.
15. Claims 7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
16. Claims 32 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

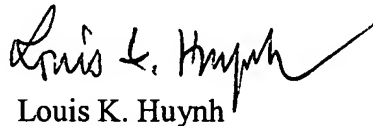
Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure has been cited on form PTO-892 along with the applied references.
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is 571-272-4462. The examiner can normally be reached on M-F from 8:00AM to 3:00PM.

Art Unit: 3721

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Louis K. Huynh
Primary Examiner
Art Unit 3721

August 02, 2006